MICHIGAN DEPARTMENT OF NATURAL SESOURCES

EPA Region 5 Records Ctr.

273107

INTEROFFICE COMMUNICATION

August 1, 1980

Water Quality-E & TS

TO:

Karl Zollner, Jr., Engineering & Technical Services Section

FROM:

Phil Roycraft, Comprehensive Studies Section

SUBJECT: Effluent Limitations, Bronson Specialties

We have for review the NPDES permit for Bronson Specialties. This facility discharges an average of 0.4632 MGD (0.0012 MGD process water and 0.462 MGD non-contact cooling water) to Branch County Drain No. 30 in Section 11, T7S, R8W and thence to Swan Creek. Swan Creek is tributary to two lakes, Long Lake and Palmer Lake downstream. Both County Drain No. 30 and Swan Creek are protected for warmwater fish, partial body contact recreation, navigation, agricultural and industrial water supply, and public water supply (at point of intake.)

Comprehensive Studies Section and the Biology Section recommend the following effluent limits for this facility:

Parameter	Recommended Limitation	
Dissolved Oxygen	5.0 mg/l as a minimum	RECEIVED
Total Suspended Solids	BPT .	AUG 6 2
рН	6.0-9.0	Water Qual Dist. II

In addition, John Wuycheck of the Biology Section recommends that total ammonia and total phosphorus be monitored once per week. Comprehensive Studies Section has no recommendations concerning oxygen consuming materials. A point source survey conducted at Bronson Specialties on September 18-19, 1979, indicated that the discharge of these materials is minimal.

According to the Office of Toxic Materials Control (OTMC), Bronson Specialties uses Gravi-flow products FGC-164 and FGC-173 as additives. Larry Fink of the OTMC recommends that the Company be required to demonstrate to the Chief of the Water Quality Division that the use and discharge of these products does not present unacceptable risks of injury to exposed aquatic populations. During the course of such a study, the concentration of both products together should not exceed 0.38 ppm at any time. This value is derived from toxicity data available for the most toxic constituent of each additive. The language describing the requirements of the demonstration study and the schedule of compliance mutually agreed to by OTMC and Engineering & Technical Services staff should be applied.

Hydrological statistics for County Drain 30 in Section 11, T7S, R8W as follows: the drainage area is 1.2 square miles; the 7-day, oncein-10 year low flow is 0 CFS. The 7-day, once-in-10-year low flow of Swan Creek at its confluence with County Drain 30 is 2.6 cfs.

ETHOMAS Newall